

Appl. No. 10/708,244  
Amdt. dated May 20, 2005  
Reply to Office action of March 25, 2005

### Amendments to the Claims

#### Listing of Claims:

Claim 1 (currently amended): A positioning apparatus installed inside a printer for  
controlling a position of a first printer part, the positioning apparatus comprising:  
5 a motor for providing a rotational motion; and  
a Scotch yoke coupled to the motor for converting the rotational motion into a  
linear motion[[:]] , the Scotch yoke comprising:  
a rotating part for accepting the rotational motion from the motor, the rotating  
part possessing a gap to indicate the position of the rotating part;  
10 wherein the position of the first printer part is controlled by the rotational motion of  
the motor via the linear motion of the Scotch yoke.

Claim 2 (currently amended): The positioning apparatus in claim 1 wherein the Scotch  
yoke further comprises:  
15 ~~a rotating part for accepting the rotational motion from the motor;~~  
a sliding part coupled to the rotating part for converting the rotational motion into a  
linear motion; and  
a protrusion extending from the sliding part for placing the Scotch yoke in contact  
with the first printer part;  
20 wherein the rotational motion of the rotating part causes the sliding part to move in  
a back-and-forth linear motion which in turn causes the protrusion to be  
in-and-out of contact with the first printer part.

Claim 3 (currently amended): The positioning apparatus in claim [[2]] 1 wherein the  
25 rotating part is a disc.

Claim 4 (original): The positioning apparatus in claim 2 wherein the sliding part is an  
arm.

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Claim 5 (currently amended): The positioning apparatus in claim [[2]] 1 wherein the rotational motion of the motor is transferred to the rotating part of the Scotch yoke via a rod.

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Claim 6 (currently amended): The positioning apparatus in claim 2 wherein the rotating part possesses a connecting protrusion and the sliding part possesses a ~~connecting protrusion~~ vertical slit wherein the sliding part is coupled to the rotating part via ~~a~~ the connecting protrusion extending from the rotating part into ~~a~~ the vertical slit of the sliding part.

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Claim 7 (canceled)

Claim 8 (currently amended): The positioning apparatus in claim [[7]] 1 wherein the position of the rotating part is determined by using a detector to sense the gap located on the rotating part.

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Claim 9 (original): The positioning apparatus in claim 1 wherein the actions of the positioning apparatus can be divided into a first action and a second action.

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Claim 10 (original): The positioning apparatus in claim 9 wherein the first action is a pressing action and the second action is a non-pressing action.

Claim 11 (original): The positioning apparatus in claim 1 wherein the first printer part can be a pinch, a platen, a reverse ribbon, a clutch, or a lifter.

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Claim 12 (currently amended): The positioning apparatus in claim 1 further comprising a plurality of non-uniform contours disc [[100]] coupled to the motor, the plurality of

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non-uniform counters disc [[100]] having a non-uniform contour for controlling the position of a second printer part.

Claims 13-20 (canceled)

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Claim 21 (new): A positioning apparatus installed inside a printer for controlling a position of a first printer part, the positioning apparatus comprising:

a motor for providing a rotational motion;

a Scotch yoke coupled to the motor for converting the rotational motion into a

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linear motion; and

a plurality of non-uniform contours disc coupled to the motor, the plurality of non-uniform counters disc having a non-uniform contour for controlling the position of a second printer part;

wherein the position of the first printer part is controlled by the rotational motion of the motor via the linear motion of the Scotch yoke.

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